

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A bus system comprising a controller (~~1~~); a high speed data transfer bus (~~2~~), the data transfer bus being subject to one or more inherent physical-layer configuration constraints for proper electrical operation; and a separate control bus (~~14~~), said control bus and said data transfer bus connecting the controller and the, or each, device (~~3, 4, 5, 6~~) connected thereto, wherein the controller is arranged to communicate with devices using the control bus in order to verify whether or not one or more of the physical-layer configuration constraints are satisfied and, if such configuration constraints are not satisfied, to modify to disable at least some of the devices using control signals transmitted on the control bus ~~the operation of at least some of the devices~~ in order to bring the data transfer bus to an operable condition.
2. (Canceled)
3. (Original) The bus system of claim 2 wherein the controller is arranged to disable devices furthest from the controller on the data transfer bus.
4. (Canceled)
5. (Currently Amended) The bus system of claim 1 ~~one of claims 1 to 4~~, wherein, if said configuration constraints are not satisfied, the controller is arranged to set a stored indicator indicative of a error condition.
6. (Currently Amended) The bus system of claim 1 ~~one of claims 1 to 5~~, wherein said physical-layer constraints comprise a constraint on the number of devices connected to the bus.

7. (Currently Amended) In a bus system comprising a controller (~~1~~); a high speed data transfer bus (~~2~~), the data transfer bus being subject to one or more inherent physical-layer configuration constraints for proper electrical operation; and a separate control bus (~~14~~), said control bus and said data transfer bus connecting the controller and the, or each, device (~~3, 4, 5, 6~~) connected thereto, a process for bringing the data transfer bus to an operable condition, comprising the steps of

- communicating with devices using the control bus in order to verify whether or not one or more of the physical-layer configuration constraints are satisfied and,
- if such configuration constraints are not satisfied, ~~to modifying the operation of~~ disabling at least some of the devices using control signals transmitted on the control bus.

8. (Canceled)

9. (Original) The process of claim 8 wherein said step of modifying comprises disabling devices furthest from the controller on the data transfer bus.

10. (Canceled)

11. (Currently Amended) The process of claim 7 ~~one of claims 7 to 10~~ further comprising, if said configuration constraints are not satisfied, setting a stored indicator indicative of a error condition.

12. (Currently Amended) The process of claim 7 ~~one of claims 7 to 11~~, wherein said physical-layer constraints comprise a constraint on the number of devices connected to the bus.

13. (Currently Amended) A computer comprising a bus according to claim 1 ~~one of claims 1 to 6~~.

14. (Currently Amended) A computer program product for a computer with a bus system

comprising a controller (1); a high speed data transfer bus (2), the data transfer bus being subject to one or more inherent physical-layer configuration constraints for proper electrical operation; and a separate control bus (14), said control bus and said data transfer bus connecting the controller and the, or each, device (3, 4, 5, 6) connected thereto, said computer program product comprising a computer readable medium having thereon:

- computer program code means, when said program is loaded, to make the controller communicate with devices using the control bus in order to verify whether or not one or more of the physical-layer configuration constraints are satisfied and,
- if such configuration constraints are not satisfied, to make the controller disable ~~modify the operation of~~ at least some of the devices using control signals transmitted on the control bus.

15. (Canceled)

16. (Original) The computer program product of claim 15 wherein, if such configuration constraints are not satisfied, the computer program code means make the controller disable devices furthest from the controller on the data transfer bus.

17. (Canceled)

18. (Currently Amended) The computer program product of claim 14 ~~one of claims 14 to 17~~ wherein, if such configuration constraints are not satisfied, the computer program code means set a stored indicator indicative of a error condition.

19. (Currently Amended) The computer program product of claim 14 ~~one of claims 14 to 18~~ wherein said physical-layer constraints comprise a constraint on the number of devices connected to the bus.